

CLAIM AMENDMENTS

Listing of Claims:

CLAIMS

1. (currently amended) A method for detecting attacks on a data communications network having a plurality of addresses for assignment to data processing systems in the network, the method comprising: identifying data traffic on the network originating at any assigned address and addressed to any unassigned address, said unassigned address is an address which is free and not assigned to user systems; inspecting any data traffic so identified for data indicative of an attack; and, on detection of data indicative of an attack, generating an alert signal.

2. (original) A method as claimed in claim 1, wherein the inspecting comprises spoofing replies to requests contained in the data traffic identified.

3. (original) A method as claimed in claim 1, comprising, on generation of the alert signal, rerouting any data traffic originating at the address assigned to the data processing system originating the data indicative of the attack to a disinfection address on the network.

4. (original) A method as claimed in claim 1, comprising, on generation of the alert signal, sending an alert message to the disinfection address.

1 5. (original) A method as claimed in claim 5, wherein the alert
2 message comprises data indicative of the attack detected.

3 6. (original) A method as claimed in claim 5, comprising, on
4 receipt of the alert message, sending a warning message from the
5 disinfection address to the address assigned to the data
6 processing system originating the data indicative of the attack.

7 7. (original) A method as claimed in claim 6, comprising
8 including in the warning message program code for eliminating the
9 attack when executed by the data processing system originating
10 the data indicative of the attack.

11 8. (currently amended) Apparatus for detecting attacks on a data
12 communications network having a plurality of addresses for
13 assignment to data processing systems in the network, the
14 apparatus comprising: an intrusion detection sensor for
15 identifying data traffic on the network originating at any
16 assigned address and addressed to any unassigned address, said
17 unassigned address is an address which is free and not assigned
18 to user systems inspecting any data traffic so identified for
19 data indicative of an attack, and, on detection of data
20 indicative of an attack, generating an alert signal.

21 9. (original) Apparatus as claimed in claim 8, wherein the
22 intrusion detection sensor in use inspects the data traffic
23 identified by spoofing replies to requests contained in the data
24 traffic identified.

25 10. (original) Apparatus as claimed in claim 8, further
26 comprising a router connected to the intrusion detection sensor
27 for rerouting, in response to generation of the alert signal, any
28 data traffic originating at the address assigned to the data

1 processing system originating the data indicative of the attack
2 to a disinfection address on the network.

3 11. (original) Apparatus as claimed in claim 8, wherein the
4 intrusion detection sensor, on generation of the alert signal,
5 sends an alert message to the disinfection address.

6 12. (original) Apparatus as claimed in claim 11, wherein the
7 alert message comprises data indicative of the attack detected.

8 13. (original) Apparatus as claimed in claim 12, further
9 comprising a disinfection server assigned to the disinfection
10 address, the disinfection server sending, on receipt of the alert
11 message, a warning message to the address assigned to the data
12 processing system originating the data indicative of the attack.

13 14. (original) Apparatus as claimed in claim 13, wherein the
14 warning message comprises program code for eliminating the attack
15 when executed by the data processing system originating the data
16 indicative of the attack.

17 15. (currently amended) A data communications network comprising:
18 a plurality of addresses for assignment to data processing
19 systems in the network; and, apparatus for detecting attacks on
20 the network as claimed in claim 8 ~~any of claims 8 to 14~~.

21 16. (currently amended) A computer program element comprising
22 computer program code means which, when loaded in a processor of
23 a data processing system, configures the processor to perform a
24 method for detecting attacks on a data communications network as
25 claimed in claim 1 ~~any of claims 1 to 7~~.

1 17. (original) A method as claimed in claim 1, further comprising
2 supporting an entity in the handling of the detected attack by
3 one of providing instructions for use of, assistance in
4 executing, and execution of disinfection program code.

5 18. (original) A method as claimed in claim 1, further comprising
6 providing a report to said entity containing information related
7 to one of alert, disinfection, rerouting, logging, discarding of
8 data traffic in the context of a detected attack.

9 19. (original) A method as claimed in claim 1, further comprising
10 billing said entity for the execution of at least one of the
11 steps contained in claim 1 ~~claims 1 to 7~~, the charge being billed
12 preferably being determined in dependence of one of the size of
13 the network, the number of unassigned addresses monitored, the
14 number of assigned addresses monitored, the volume of data
15 traffic inspected, the number of attacks identified, the number
16 of alerts generated, the signature of the identified attack, the
17 volume of rerouted data traffic, the degree of network security
18 achieved, the turnover of said entity.

19 20. (original) A method as claimed in claim 1, further comprising
20 providing said method for several entities and using technical
21 data derived from the attack-handling for one of said entities
22 for the attack-handling for another of said entities.

23 21. (currently amended) A method for deploying an intrusion
24 detection application for an entity, comprising:
25 connecting an intrusion detection sensor to a network used by
26 said entity for identifying data traffic on the network
27 originating at any assigned address and addressed to any
28 unassigned address, said unassigned address is an address which
29 is free and not assigned to user systems, and for inspecting any

1 data traffic so identified for data indicative of an attack and
2 for, on detection of data indicative of an attack, generating an
3 alert signal,
4 - connecting a router to said network for rerouting, in
5 response to generation of the alert signal, any data traffic
6 originating at the address assigned to the data processing system
7 originating the data indicative of the attack to a disinfection
8 address on the network.

9 22. (original) A method according to claim 21, further comprising

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11 - connecting a disinfection server assigned to the
12 disinfection address, to the network, the disinfection server
13 being adapted for sending, on receipt of the alert message, a
14 warning message to the address assigned to the data processing
15 system originating the data indicative of the attack.

16 23. (new) A computer program product comprising a computer
17 usable medium having computer readable program code means
18 embodied therein for causing detection of attacks on a data
19 communications network having a plurality of addresses for
20 assignment to data processing systems in the network, the
21 computer readable program code means in said computer program
22 product comprising computer readable program code means for
23 causing a computer to effect the functions of claim 1.

24 24. (new) A computer program product comprising a computer usable
25 medium having computer readable program code means embodied
26 therein for causing deployment of an intrusion detection
27 application for an entity, the computer readable program code
28 means in said computer program product comprising computer
29 readable program code means for causing a computer to effect the
30 functions of claim 21.